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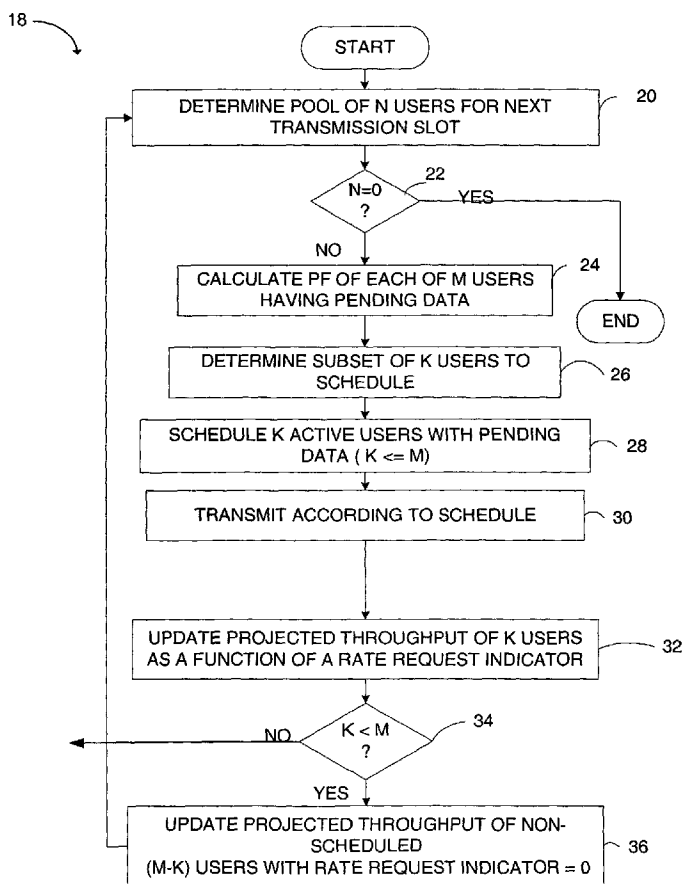
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[Continued on next page]

(54) Title: METHOD AND APPARATUS FOR SCHEDULING PACKET DATA TRANSMISSIONS IN A WIRELESS COMMUNICATION SYSTEM



(57) Abstract: A method (18) for scheduling packet data transmissions in a wireless communication system wherein a per-user Priority Function (PF) (24) is based on a channel condition indicated by a Rate Request indicator (RRI). The method also considers fairness criteria dictated by predetermined Quality of Service (QOS) requirements. In one embodiment, the rate request indicator is a Data Rate Request (DRR). In another embodiment, the rate request indicator is Carrier-to-interference (C/I) information. In the exemplary embodiment, the base station calculates a Priority Function (PF) for the multiple mobile users. Each PF is a function of the rate request indicator and the projected throughput of a given mobile user. In one embodiment, the predicted throughput is calculated by $T' = (T')^\alpha$.



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INTERNATIONAL SEARCH REPORT

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A. CLASSIFICATION OF SUBJECT MATTER
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According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 H04Q H04L

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	EP 1 003 302 A (NEC CORP.) 24 May 2000 (2000-05-24) abstract; figures 1-4 column 11, line 36 -column 13, line 22 ---	1,8,12
Y	DE 199 07 085 C (SIEMENS AG.) 13 April 2000 (2000-04-13) abstract; figures 1-3 column 3, line 68 -column 4, line 31 ---	1,8,12
A	WO 98 45966 A (QUALCOMM INC.) 15 October 1998 (1998-10-15) abstract; figures 2,7,10 page 45, line 12 -page 48, line 11 --- -/--	1,8,12

☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

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- *G* document member of the same patent family

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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

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A	EP 1 089 500 A (NORTEL NETWORKS LTD.) 4 April 2001 (2001-04-04) abstract; claim 1; figures 1,3,6 page 6, line 37 - line 52 -----	1,8,12
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